

recyclable materials. Single-stream collection allows all recyclable materials to be mixed together, rather than separated into two streams (commingled cans and bottles in one stream, and paper, cardboard, and mixed paper in the other).

The City will comprehensively study the impact—locally, regionally, and nationally—of converting from dual-stream collection to single-stream collection. It will complete the study as soon as possible because the opportunity to participate in single-stream collection will be available within the next year.

**This action supports the City's SWM program goal (Chapter 4) of maintaining a private-public infrastructure that supports reuse, repair, and recycling through consideration of a method that increases recycling by increasing convenience.**

The City has offered curbside collection of cardboard and mixed paper (such as magazines, catalogs, computer and copier paper, junk mail, and phone books) since 1995. Although many residents conscientiously recycle these items, many still choose not to recycle cardboard and mixed paper. Consequently, a large volume of material that could be recycled ends up in the trash.

Cardboard and mixed paper that is not recycled by the City's residential customers costs the City in three ways:

- *Increased disposal costs.* The City pays Fairfax County \$39.95 per ton for disposal of refuse dumped at the I-66 transfer station, including cardboard and paper that could have been recycled.
- *Lost revenue.* The City currently receives approximately \$2,500 per month from the sale of fiber (newspaper, cardboard, and mixed paper) collected through the curbside recycling program. Unrecycled cardboard and paper represents lost revenue.
- *Increased labor.* The City pays the curbside collection contractor a fixed cost (\$3.50 per household per month) for the collection of curbside recyclables, regardless of how much is collected from each household. City crews must handle cardboard and mixed paper thrown in the trash as part of the refuse stream.

In 2002, the ESC Curbside Recycling Task Group studied this issue and determined that inconvenience is the primary reason that some residents choose not to recycle cardboard and mixed paper. The requirements to flatten and cut or fold cardboard and to place all fiber in paper bags have deterred many residents. Single-stream recycling would allow residents to place all recyclable materials into green bins or a single large container without separating them. Unflattened and oversized boxes could be included as is since the vehicles used for collection in single-stream programs are typically trash compactor trucks.

Single-stream recycling has been a trend in various parts of the country for the past four years. The result has been higher participation in curbside recycling programs and increased tonnages diverted from the waste stream. This opportunity will soon be available to the City of Falls Church because the City's current marketing contractor for curbside recyclables is retrofitting its processing facilities to handle a single stream of recyclables within the next year.

On the negative side, representatives of the paper industry report that fiber coming from single-stream programs is diminished in quality, due primarily to broken glass mixed with the fiber. This degraded material has posed problems for paper processors and paper mills, but proponents of single-stream recycling assert that state-of-the-art equipment in single-stream facilities produces a relatively clean material.

The City will weigh the benefits and drawbacks of single-stream recycling.

### **Implementation**

Implementation involves the following steps:

1. Comprehensively study single-stream recycling.
2. If it appears viable, negotiate with the City's curbside recycling contractor to accommodate single-stream collection.
3. Provide promotional materials and additional collection containers to residents.
4. Review program performance and revise promotional strategies, as needed.

### **Funding**

The ESC will assist the staff with the recommended study. If single-stream recycling is implemented, the administrative, educational, and equipment costs will be covered through the City's General Fund.

## **Participate in Regional Promotion of CDD Recycling**

CDD management issues, especially the shrinking disposal capacity in the area, are regional concerns. The City will use its membership in regional governmental bodies, such as MWCOG and NRVC, to help promote increased CDD recycling in the region.

**This action supports the City's SWM program goal (Chapter 4) of maintaining a private-public infrastructure that supports reuse, repair, and recycling by promoting recycling of material that would otherwise be discarded.**

CDD recycling data reported to the VDEQ suggests that CDD recycling in Virginia is low, ranging from less than 1 percent to 3.25 percent in recent years. In addition, the VDEQ estimates that for the five private CDD landfills that receive CDD waste from the City, the average remaining capacity is roughly six years.

Building construction and renovation in the City continues to grow, and wastes generated at these sites need to be disposed of in an environmentally sound, cost-effective manner. By participating as a member of the NVRC and MWCOG, the City can help reach a regional solution to this problem. Through these bodies, the City is in a position to promote CDD recycling as a preferred waste management method.

### **Implementation**

Implementation involves the following steps:

1. Represent the City on the NVRC Waste Management Board and the MWCOG Recycling Committee. (The City's Recycling Coordinator currently serves.)
2. Assist with the evaluation of regional CDD capacity requirements. The regional partnership will study the CDD disposal capacity required and the remaining capacity in the region.
3. Help develop a regional approach. From this analysis, the regional partnership will develop an approach to address the regional CDD disposal capacity concerns. The regional partnership will also review recycling and other CDD management strategies to minimize CDD disposal requirements.
4. Periodically review capacity requirements; adjust the approach, as necessary.

### **Funding**

The costs of membership in NVRC and MWCOG are covered through the City's General Fund.

## **Provide Tools to Promote Increased Source Reduction, Reuse, and Recycling**

The City will identify opportunities to provide small investments in equipment as a catalyst for expanding source reduction, reuse, and recycling activities. This action is described in more detail in the source reduction and reuse section of this chapter.

## Establish a Recycling Rate Goal

The City will adopt a short-term goal of a 65 percent recycling rate for the residential sector and a long-term goal of a 65 percent recycling rate for the entire City. Establishing a goal to increase MSW recycling throughout the City will create a unified message to the community. Specifying a target for the MSW recycling rate in the City will create a tangible goal for recycling initiatives.

**This action supports the City's SWM program goal (Chapter 4) of educating all members of the Falls Church community on the value of natural resources and the benefits of reducing consumption and adopting sustainable practices by providing ongoing feedback to those who generate waste.**

In the late 1990s, the City of Falls Church realized a *residential* recycling rate of 65 percent. However, since that time, the recycling rate has decreased due to a number of factors. In 2002, the City's residential recycling rate was 54.6 percent. The City expects the actions in this SWMP to increase recycling rates at least to the historical level in the short term. Therefore, the City is establishing a short-term recycling goal of 65 percent for the City's residential sector.

Because less recycling occurs in the business and institutional sectors than in the residential sector, the City's *overall* recycling rate is lower—the 2002 citywide recycling rate was 50.5 percent. The City expects implementation of the actions in this SWMP will lead to increased recycling in the business and institutional sectors. Therefore, the City is establishing a long-range goal of 65 percent for the City's overall recycling rate.

Establishing both residential and citywide recycling rate goals will motivate residents and hold businesses and institutions accountable for establishing more responsible solid waste disposal practices.

### Implementation

Implementation involves the following steps:

1. Confirm current recycling rates in the residential, institutional, and business sectors.
2. Advertise the current recycling rates as part of an education campaign to increase those rates.
3. Identify and target recycling programs that can be implemented in the most efficient and cost-effective manner.
4. Utilize a comparison of existing rates and goal rates to motivate progress among the various sectors.

5. Use a public display (similar to the United Way campaign thermometer) to track progress in reaching the goal.
6. Assess the waste stream every five years to identify the materials remaining and to aid in future recycling program planning and development.
7. Develop improved tracking systems to manage and document recycling program progress.
8. Assess, review, and revise the residential and overall goals at the five-year mark.

### **Funding**

Administrative and educational costs will be covered through the City's General Fund. The ESC will assist with data collection, information gathering, and development of educational materials.

## **Promote Establishment of a Regional Food Waste Composting Facility**

Under this action, the City will use its membership in regional governmental bodies, such as MWCOG and NRVC, to help promote the establishment of food waste composting in the region.

**This action supports the City's SWM program goal (Chapter 4) of maintaining a private-public infrastructure that supports reuse, repair, and recycling by developing an outlet for curbside collection and recycling of food waste.**

Food waste represents one of the largest components of the MSW stream. Currently, most food waste generated in the City is burned at the Fairfax County waste-to-energy facility, and the residue is buried at the County's ash landfill.

Recognizing the value of food waste as a compostable material that can be processed into an effective soil amendment, several large U.S. municipalities have recently removed food scraps from the waste stream by implementing residential curbside collection programs. The first step toward implementation of such programs was the development of a private-public partnership between the government and the private sector to construct a large-scale food waste composting facility.

Establishing a food waste composting facility in the area will likely increase regional recycling rates significantly. A food waste composting facility will also facilitate implementation of residential curbside collection of food waste in the City.

## Implementation

Implementation involves the following steps:

1. Represent the City on the NVRC Waste Management Board and the MWCOG Recycling Committee. (The City's Recycling Coordinator currently serves.)
2. Assist with the evaluation of regional food waste capacity requirements. The regional partnership will study the food waste disposal capacity required.
3. Assist with development of a regional approach. From this analysis, the regional partnership will develop an approach to work with the private sector in planning for the establishment of a regional food waste composting facility.

## Funding

Costs of membership in NVRC and MWCOG are covered through the City's General Fund.

## Collection

Although not a level in the solid waste hierarchy, collection of solid waste is key to implementation of the City's solid waste management strategies over the next 20 years. Table 11-5 presents actions selected by the City of Falls Church for the future collection of solid waste in the City.

*Table 11-5. City of Falls Church Collection SWMP Actions*

Collection SWMP Actions	
–	Maintain City refuse collection
–	Continue current yard waste collection system, including vacuumed leaf collection
–	Implement Pay-As-You-Throw collection system
–	Expand collection of electronic wastes
–	Continue using the current special wastes management system
–	Establish an HHW collection program in the City of Falls Church
–	Maintain the current litter control program
–	Increase effectiveness of street sweeping
–	Increase efforts to prevent illegal dumping
–	Promote use of special fuels, filters, and special vehicles for collection
–	Implement a collection and disposal strategy for emergencies

## Maintain City Refuse Collection

Under this action, the City will maintain refuse collection as an in-house service. That is, the City will continue to provide MSW collection service to residents by City employees operating City-owned trucks.

The City will continue to evaluate the costs and benefits of privatization of refuse collection services over the SWMP planning period. The City may consider contracting the services of a consultant to study the costs and benefits of privatization. This study will be performed as soon as possible before the City makes a major investment in new equipment.

**This action supports the City's SWM program goal (Chapter 4) of ensuring the safe and efficient disposal of discarded materials that cannot be reused, repaired, or recycled by providing reliable, ongoing refuse collection to City residents.**

The efficiency and security afforded by an in-house collection system has served the City well for many decades. Because this system has enabled the City to exercise full control over the collection of refuse, yard waste, and bulk waste, the City has an excellent track record of reliable solid waste collection service, particularly following events such as snowstorms and hurricanes. In addition, citizens have placed a high value on employing a solid waste collection crew that is familiar with the City and with whom residents are familiar and accustomed to seeing in their neighborhoods.

Contracted waste hauling services have potential fiscal benefits but substantial qualitative costs. As the waste hauling industry continues to consolidate, the users of that service become increasingly beholden to the sole remaining service providers. Once the City liquidates its resources (refuse trucks, for example), it is unlikely it could ever reestablish a fleet due to the substantial cost of purchasing numerous vehicles at one time. Instead, the City's options would be limited to paying the rate the sole provider is charging for waste hauling services. Furthermore, if the haulers lose familiarity with the community, they may also lose the sense of ownership and commitment to a job well done that citizens generally see in our City crews.

In its evaluation of the current refuse collection system, the Solid Waste Management Plan Advisory Committee (SWMPAC) took into consideration concerns raised by the City's Superintendent of Operations. In addition to the high costs of purchasing and maintaining collection vehicles, he pointed out that curbside collection of refuse (as well as yard waste and "specials") is physically demanding and that the tight local labor market will impact the availability of certified collection crews over the next 20 years.